

In the Claims:

Claims 1-31 (cancelled)

Claim 32 (new): An apparatus comprising:

- (a) a vessel with an opening, configured to accept a substance through the opening and further configured for the opening to be sealed;
- (b) a synthesis chamber configured to accept the vessel and further configured to establish or maintain a protective gas atmosphere when the vessel is present;
- (c) a test reactor configured to accept the vessel, and further configured to establish or maintain a protective gas atmosphere when the vessel is present;
- (d) means located within the test reactor to destroy the vessel in order to open the vessel; and
- (e) means for transferring the vessel, when sealed, from the synthesis chamber to the test reactor.

Claim 33 (new): The apparatus of claim 32, wherein the vessel, when sealed, is air, moisture, or light impervious.

Claim 34 (new): The apparatus of claim 32, wherein a gas-tight cover is used to seal the opening of the vessel.

Claim 35 (new): The apparatus of claim 34, wherein the gas-tight cover is formed of the same material as the vessel.

Claim 36 (new): The apparatus of claim 34, wherein the means to destroy the vessel destroys the gas-tight cover in order to open the vessel.

Claim 37 (new): The apparatus of claim 32, wherein the vessel is sealed by covering the opening with a film, or a curable or viscous material.

Claim 38 (new): The apparatus of claim 37, wherein the means to destroy the vessel destroys the film, or curable or viscous material in order to open the vessel.

Claim 39 (new): The apparatus of claim 32, wherein the synthesis chamber is a glove box.

Claim 40 (new): The apparatus of claim 32, wherein the protective gas is argon, nitrogen, helium or mixtures thereof.

Claim 41 (new): The apparatus of claim 32, further comprising a lock connected to the test reactor, the lock being configured to establish a protective gas atmosphere around the vessel prior to the vessel being transfer into the test reactor.

Claim 42 (new): The apparatus of claim 32, wherein the vessel is made from glass, ceramic, plastic, metal, or a composite material.

Claim 43 (new): The apparatus of claim 32, wherein the vessel is made from a material that will dissolve in a solvent.

Claim 44 (new): The apparatus of claim 32, wherein the means for transferring the vessel is a fully-automatic apparatus or a robot.

Claim 45 (new): An apparatus comprising:

- (a) a closed vessel configured to contain a substance, the closed vessel including a conduit connection;
- (b) a synthesis chamber configured to contain the closed vessel and establish or maintain a protective gas atmosphere;
- (c) a test reactor;
- (d) a valve;
- (e) a first conduit configured to be connected in fluid communication with the conduit connection of the closed vessel and the valve;
- (f) a second conduit configured to be connected in fluid communication with the valve and the test reactor;
- (g) means for transferring the substance from the closed vessel through the first conduit to the valve when the closed vessel is in the synthesis chamber and from the valve through the second conduit to the test reactor.

Claim 46 (new): The apparatus of claim 45, wherein the means for transferring the substance is a pump.

Claim 47 (new): The apparatus of claim 45, wherein the synthesis chamber is a glove box.

Claim 48 (new): The apparatus of claim 45, wherein the protective gas is argon, nitrogen, helium or mixtures thereof.

Claim 49 (new): The apparatus of claim 45, wherein the test reactor is configured to maintain a protective gas atmosphere.

Claim 50 (new): The apparatus of claim 45, wherein the means for transferring the substance and the valve are automatically controlled.